

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-22 (Canceled)

Claim 23 (Previously Presented): A method for anchoring a joining element in a part consisting of porous material, the joining element having a distal end and a proximal end and including a thermoplastic material at least at said distal end, the method comprising the steps of:

forming a bore in the part, the bore having an inner closed end and being matched to the shape and dimensions of the joining element so that the joining element can be positioned in the bore with substantially no force and with the distal end of the inserted joining element disposed against the inner closed end of the bore,

inserting the joining element in the bore such that the distal end of the joining element is disposed against the inner closed end of the bore,

applying pressure to the proximal end of the joining element to force the joining element deeper into the bore, the pressure being applied substantially along a central axis of the bore and producing an increase of pressure of the distal end of the joining element against the inner closed end of the bore,

during the application of pressure, applying vibration energy to the joining element to cause the thermoplastic to plasticize at the distal end of the joining element, the pressure causing the plasticized thermoplastic material to flow into

pores of the part beyond the inner closed end of the bore in the axial direction of the bore, thereby forming a macroscopic anchoring connection between the part and the distal end of the joining element.

Claim 24 (Canceled)

Claim 25 (Canceled)

Claim 26 (Previously Presented): A method according to claim 23 including joining a second part made of a porous material to the first mentioned part with the joining element, wherein the joining element is a joining pin having a reduction in diameter intermediate the ends thereof forming a first shoulder, wherein the step of forming a bore includes forming a portion of the bore through the second part and into the first part to the inner closed end, the bore in the second part having a reduction in diameter forming a second shoulder matching the first shoulder of the joining pin, and the step of positioning includes inserting the joining pin into the first and second parts so that the first and second shoulders are in contact with each other, the contacting first and second shoulders forming a second macroscopic connection between the second part and the joining element.

Claim 27 (Previously Presented): A method according to claim 23 including joining a second part made of a porous material to the first mentioned part with the joining element, wherein the joining element is a joining pin, wherein the step of forming a bore includes forming a portion of the bore through the second part and into the first part to an inner closed end, and wherein the joining pin has an enlarged head portion on the proximal end thereof.

Claim 28 (Previously Presented): A method according to claim 23 including fixedly attaching the joining element to a second part.

Claim 29 (Previously Presented): A method according to claim 28 wherein the step of fixedly attaching is performed after positioning the joining element in the bore.

Claim 30 (Previously Presented): A method according to claim 23 wherein the step of applying vibration energy includes ultrasonically exciting the joining element to cause the thermoplastic to plasticize.

Claim 31 (Previously Presented): A method according to claim 23 wherein the joining element consists entirely of thermoplastic material capable of being plasticized.

Claim 32 (Canceled).

Claim 33 (Previously Presented): A method according to claim 23 wherein the part comprises wood or a woodlike material.

Claim 34 (Previously Presented): A method according to claim 23 wherein the part comprises at least one of sandstone, porous ceramic, burnt brick or concrete.

Claims 35-64 (Canceled).

Claim 65 (New): A method according to claim 29, wherein for fixedly attaching the second part, the joining element comprises at its proximal end an internally threaded opening for receiving an attachment of the second part.

Claim 66 (New): A method according to claim 23, wherein the distal end of the joining element is shaped with a point.

Claim 67 (New): A method according to claim 23, wherein the distal end of the joining element is flat or concave.

Claim 68 (New): A method according to claim 23, wherein the thermoplastic material is selected from the group consisting of polyamide, polycarbonate, polyester carbonate, acrylonitrile-butadiene-styrene, styrene-acrylonitrile, polymethylmethacrylate, polyvinyl chloride, polyethylene, polypropylene and polystyrene.

Claim 69 (New): A method according to claim 23, wherein the joining element further comprises another material that is different from the thermoplastic material.